

REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicants amend claims 1-13 and add new claims 14-20. Accordingly, claims 1-20 are pending in the application.

Applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of the priority documents, and for indicating that the drawings are acceptable.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

35 U.S.C. § 112

The Office Action rejects claims 3-8 and 10-13 under 35 U.S.C. § 112 as depending from a non-existent claim "0."

Applicants regret these typographical errors, and have amended claims 3-8 and 10-13 to provide a proper dependency.

Accordingly, Applicants respectfully submit that claims 3-8 and 10-13 all satisfy the requirements of 35 U.S.C. § 112, and accordingly respectfully request that the rejections under 35 U.S.C. § 112 be withdrawn.

35 U.S.C. § 102

The Office Action rejects claims 1, 2 and 9 under 35 U.S.C. § 102 over Tsutsui U.S. Patent 7,053,873 ("Tsutsui").

Applicants respectfully traverse these rejections for at least the following reasons.

Claim 1

Among other things, the pixel cell of claim 1 includes at least two drive elements arranged to drive the emissive element in accordance with said analog data signal (V_{in}), and selecting means for selecting one or more of the drive elements in response to one or more select signals, and for providing a data signal to the selected drive element(s), and each drive element is adapted to drive the emissive element in a different drive current range in response to a given data signal.

Applicants respectfully submit that Tsutsui does not disclose any pixel cell that includes this combination features.

As best as Applicants can understand the Office Action, the Office Action is claiming that: (1) element 46 in FIG. 14 of Tsutsui corresponds to the recited emissive element; (2) A0 in FIG. 5 of Tsutsui corresponds to the analog data signal; (3) the transistors TT0, TT1 and TT2 in FIG. 5 of Tsutsui correspond to the recited drive elements; (4) the transistors GT0, GT1 and GT2 in FIG. 5 in Tsutsui correspond to the recited selecting means, and (5) *"since the variable capacitances of C0, C1 and C2, (sic) each of the driving element (sic) TT0, TT1, TT2 have (sic) different response but is ultimately controlled by the A0 analog signal."*

Applicants respectfully disagree with this analysis.

At the outset, while Tsutsui does teach that the second embodiment of Tsutsui – which includes an analog operating mode – can be applied in the case of the EL element 46 in FIG. 14, this does not mean that Tsutsui teaches or even remotely suggests that one could just replace the liquid crystal 21 in the circuit of FIG. 5 with EL element 46. Indeed, unlike FIG. 5 which includes the liquid crystal 21, FIG. 14 of Tsutsui very specifically **adds EL drive transistor 45¹** and anyone of skill in the art understands that such a device is necessary to properly drive EL element 46. Given this understanding, it is apparent that the only drive element for an emissive element that is taught by Tsutsui is the **single** EL drive transistor 45. In FIG. 14, transistors TT0, TT1, and TT2 are only **charge transfer transistors** – and are clearly described and labeled as such by Tsutsui. They do not drive anything.

So Tsutsui does not disclose any pixel with an emissive element and at least two drive elements, and so it cannot disclose the pixel of claim 1.

Furthermore, TT0, TT1 and TT2 are not adapted to drive any emissive element in a different current range in response to the analog signal A0. Tsutsui teaches that in the analog driving mode, the transistors T0, T1 and T2 are all always turned on and therefore the same analog image signal A0 voltage is always provided

¹ Tellingly, it is noted that EL drive transistor 45 is clearly shown to be "connected to the power supply" VDD, as is recited for the **at least two** drive elements of claim 1.

to the gate of EL drive transistor 45 – regardless of the values of the capacitors C0, C1 and C2. See Tsutsui at col. 6, lines 16-33. Therefore emissive element 46 is not driven in any different current ranges by transistors T0, T1 and T2.

Finally, Applicants respectfully submit that GT0, GT1 and GT2 are not selecting means. All of their gates are connected together and to the line G1. These transistors do not perform any selection, and in particular do not select one or more drive elements in response to one or more select signals, and provide a data signal to the selected drive element(s).

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Tsutsui.

Claim 2

Claim 2 depends from claim 1 and is deemed patentable for at least the reason set forth above with respect to claim 1

Claim 9

Among other things, the method of claim 9 includes associating the analog data signal with one or more select signals indicating a desired drive current range, and, in response to the one or more select signals, providing the analog data signal to a selected one or more of the drive elements in the pixel cell to drive the emissive element in the desired drive current range.

Tsutsui only has one drive element for an emissive device (EL drive transistor 45).

Tsutsui does not provide the analog data signal to any selected one or more drive elements.

Tsutsui does not have any select signals that indicate any desired drive current range.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 9 is patentable over Tsutsui.

CLAIMS 3-8 and 10-13

Claims 3-8 as amended now include all of the features of claim 1, and are

deemed patentable for at least the reasons set forth above with respect to claim 1. These claims also recite numerous other novel features. a detailed explanation of which is deemed moot at this point.

Claims 10-13 as amended now include all of the features of claim 9, and are deemed patentable for at least the reasons set forth above with respect to claim 9. These claims also recite numerous other novel features. a detailed explanation of which is deemed moot at this point.

NEW CLAIMS 14-20

New claims 14-20 depend variously from claims 1, 7 and 9 and are deemed patentable for at least the reasons set forth above with respect to claims 1, 7 and 9, respectively. These claims also recite numerous other novel features. a detailed explanation of which is deemed moot at this point.

CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-20 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

VOLENTINE & WHITT

By: 

Kenneth D. Springer
Registration No. 39,843

VOLENTINE & WHITT
11951 Freedom Drive, Suite 1260
Reston, Virginia 20190
Telephone No.: (571) 283.0724
Facsimile No.: (571) 283.0740